

RAW SEQUENCE LISTING

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Application Serial Number: 10/549,945
Source: IF40
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DATE: 08/24/2006

PATENT APPLICATION: US/10/549,945

TIME: 15:06:02

Input Set : A:\fmc-adv-015.ST25.txt

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3 <110> APPLICANT: Chen, Ruihua
 4 Gilbey, Susan N.
 5 Wong, Victoria A.
 6 Halling, Blake
 7 Allenza, Paul
 9 <120> TITLE OF INVENTION: Hemipteran Glutamate Decarboxylase
 11 <130> FILE REFERENCE: 60301-USA (FMC-ADV-015)
 13 <140> CURRENT APPLICATION NUMBER: 10/549,945
 C--> 14 <141> CURRENT FILING DATE: 2005-09-20
 16 <150> PRIOR APPLICATION NUMBER: PCT/US2004/008457
 17 <151> PRIOR FILING DATE: 2004-03-19
 19 <150> PRIOR APPLICATION NUMBER: US 60/456,302
 20 <151> PRIOR FILING DATE: 2003-03-20
 22 <160> NUMBER OF SEQ ID NOS: 4
 24 <170> SOFTWARE: PatentIn version 3.3
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 1936
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Aphis gossypii
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36 aattctaagc ccgatggaca gcagtccaag tatcagctgt caaaggatac agctggactt	180
38 cgttcaacag atttattacc tcataatttg tccggacagg cacaaaccag agagtttctt	240
40 ttaaaagtcg ttgatattct agtagattac attgatgacg ttaatgatag aaacgaaaaa	300
42 gtattgcatt ttaagcacc cgaagagatg ttacgactgc tacaattgga tattccaac	360
44 gaaggtgtgc cattacaaaa tttaatcgac gattgcagtc taacactcaa gcatcaagta	420
46 aaaacaggac atccaagatt tttcaaccag ctttcatgcg gtctagacat cgtgtccatg	480
48 gctggcgaat ggctgacggc gacggctaac acgaacatgt tcacctacga aatcgctcca	540
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52 accggcgact caatttttgc tccaggtgga tcaatatcga atatgtacgc gtttttggcc	660
54 gcccgtcata aaatgttccc aggatacaag gaacaaggac tccactcgat caaaggacaa	720
56 ctggtcatgt acacatcaaa ccaatcgcat tattcggtta agagttgtgc atcggtatgc	780
58 ggactaggaa ccgaaaattg tgtcgaagta cctagcgacg aaagggggccg catgatacct	840
60 tctgagctgg agcgccctcat attggaaaga aaatccaaag gccacatacc gtttttcgtc	900
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64 atttgcgaaa aatataagct gtggcttcac attgatgctg cctgggggtgg aggactgctt	1020
66 ctatctcgca agtaccgata tccccgtctg gctggcagct aacgggctaa ctcagtga	1080
68 ttgaatccac acaaaacttat gggcacctta ctccagtgct ccacaatata ttttcgagag	1140
70 aatggaattt tgatcagctg caaccaaatg agcgcggaat acttattcat gcaagacaaa	1200
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76 gatcacttga tggaaactcag tgaatatatg gtggagaaaa ttaaagcatc gccagacaaa	1380

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82 ctgaaggcca aaatgatgga agccggcacg ctgatggtag ggtatcagcc actaaacgag 1560
84 ataccgaact ttttccggaa cattatatcc agcgccgcgg tcaccaagga agacgttgac 1620
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92 ataataataa taataataat aagtagccta tgctgcgttt ataatacaga taatcgcata 1860
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114 Gly Gln Ala Gln Thr Arg Glu Phe Leu Leu Lys Val Val Asp Ile Leu
115 35 40 45
118 Val Asp Tyr Ile Asp Asp Val Asn Asp Arg Asn Glu Lys Val Leu His
119 50 55 60
122 Phe Lys His Pro Glu Glu Met Leu Arg Leu Leu Gln Leu Asp Ile Pro
123 65 70 75 80
126 Asn Glu Gly Val Pro Leu Gln Asn Leu Ile Asp Asp Cys Ser Leu Thr
127 85 90 95
130 Leu Lys His Gln Val Lys Thr Gly His Pro Arg Phe Phe Asn Gln Leu
131 100 105 110
134 Ser Cys Gly Leu Asp Ile Val Ser Met Ala Gly Glu Trp Leu Thr Ala
135 115 120 125
138 Thr Ala Asn Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val Phe Ile
139 130 135 140
142 Leu Met Glu Asn Val Val Leu Thr Lys Met Arg Glu Ile Ile Gly Trp
143 145 150 155 160
146 Lys Thr Gly Asp Ser Ile Phe Ala Pro Gly Gly Ser Ile Ser Asn Met
147 165 170 175
150 Tyr Ala Phe Leu Ala Ala Arg His Lys Met Phe Pro Gly Tyr Lys Glu
151 180 185 190
154 Gln Gly Leu His Ser Ile Lys Gly Gln Leu Val Met Tyr Thr Ser Asn
155 195 200 205
158 Gln Ser His Tyr Ser Val Lys Ser Cys Ala Ser Val Cys Gly Leu Gly
159 210 215 220
162 Thr Glu Asn Cys Val Glu Val Pro Ser Asp Glu Arg Gly Arg Met Ile
163 225 230 235 240
166 Pro Ser Glu Leu Glu Arg Leu Ile Leu Glu Arg Lys Ser Lys Gly His
167 245 250 255
170 Ile Pro Phe Phe Val Ser Ala Thr Ala Gly Thr Thr Val Leu Gly Ala
171 260 265 270

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182 Lys Tyr Arg Tyr Pro Arg Leu Ala Gly Ile Glu Arg Ala Asn Ser Val
183 305      310      315      320
186 Thr Trp Asn Pro His Lys Leu Met Gly Thr Leu Leu Gln Cys Ser Thr
187      325      330      335
190 Ile His Phe Arg Glu Asn Gly Ile Leu Ile Ser Cys Asn Gln Met Ser
191      340      345      350
194 Ala Glu Tyr Leu Phe Met Gln Asp Lys Leu Tyr Asp Val Gln Tyr Asp
195      355      360      365
198 Thr Gly Asp Lys Val Ile Gln Cys Gly Arg His Asn Asp Val Phe Lys
199      370      375      380
202 Leu Trp Leu Gln Trp Arg Ala Lys Gly Thr Glu Gly Phe Glu Lys His
203 385      390      395      400
206 Met Asp His Leu Met Glu Leu Ser Glu Tyr Met Val Glu Lys Ile Lys
207      405      410      415
210 Ala Ser Pro Asp Lys Tyr Tyr Leu Leu Leu Glu Pro Glu Met Val Asn
211      420      425      430
214 Val Ser Phe Trp Tyr Val Pro Lys Arg Leu Arg Asn Ile Pro His Ser
215      435      440      445
218 Pro Lys Arg Ala Glu Ser Leu Gly Lys Ile Thr Pro Ile Leu Lys Ala
219      450      455      460
222 Lys Met Met Glu Ala Gly Thr Leu Met Val Gly Tyr Gln Pro Leu Asn
223 465      470      475      480
226 Glu Ile Pro Asn Phe Arg Asn Ile Ile Ser Ser Ala Ala Val Thr
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231      500      505      510
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249 <212> TYPE: DNA
250 <213> ORGANISM: Aphis gossypii
252 <400> SEQUENCE: 4
253 caggaagatt tggaataacg c

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VERIFICATION SUMMARY

DATE: 08/24/2006

PATENT APPLICATION: US/10/549,945

TIME: 15:06:03

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